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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,601	10/11/2000	Franco Lo Giudice	198404US0	5262
22850	7590	06-03/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			ZIMMER, MARC S	
			ART UNIT	PAPER NUMBER
			1712	

DATE MAILED: 06/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/685,601

Applicant(s)

GIUDICE ET AL.

Examiner

Marc S. Zimmer

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☒ Claim(s) 8, 10 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Priority

Applicant is reminded of the Examiner's request for a new copy of the priority document so that the case, which was lost, may be fully reconstructed.

Specification

The disclosure is objected to because page 3, lines 14-20 allude to a polysiloxane having a specified molecular weight but it is unclear as to whether the molecular weight reported is number-average molecular weight or weight-average molecular weight.

Claim Objections

Claims 8, 10, and 16 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Concerning claims 8 and 16, the fact that there are no amounts disclosed for the hydrocarbon and polysiloxane components in claim 1 would already serve to indicate that these materials may be provided in any ratio. Likewise, claim 10 is not further limiting insofar as it would have already been assumed that any mode of formulation could be employed.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

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Claims 1-29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. As before, it is unclear whether the molecular weight recited in claims 1 and 3 is a number-average molecular weight or a weight-average molecular weight.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 6, 7, 9, 21, and 24-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As for claims 6, 7, and 9, these claims lack antecedent basis in claim 1 for the mention of the organic polymer and its proportions because claim 1 is directed only to the additive composition itself, which does not include said polymer. (Mention of an organic polymer is only made in the context of an intended use recitation.)

Claims 2 and 24-27 provide for the use of an additive composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 2 and 24-27 are also rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an

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improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Concerning claim 21, the phrase "as such" in line 3 is not understood.

As for claim 28, the meaning of the phrase "added separately" is unclear. Is Applicant stating that the polysiloxane and hydrocarbon compound are not to be added concomitantly? This interpretation is unlikely given that the polysiloxane is not even a mandatory ingredient of the additive. Nonetheless, this the only meaning the Examiner could conceive of hence, for the purpose of evaluating claim 18 against the prior art, it be presumed that both the polysiloxane and the branched hydrocarbon are employed and that they are added at different times.

Claim Analysis

Nearly the entire preamble is devoted to a recitation of intended use. Section 2112.02 of the MPEP provides direction as to how phrases such as this are to be treated: "If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305, 51 USPQ2d 1161, 1165 (Fed. Cir. 1999). See also *Rowe v. Dror*, 112 F.3d 473, 478, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997) ("where a patentee defines a

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structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention, the preamble is not a claim limitation"); *Kropa v. Robie*, 187 F.2d at 152, 88 USPQ2d at 480-81 (preamble is not a limitation where claim is directed to a product and the preamble merely recites a property inherent in an old product defined by the remainder of the claim).

That the intended role of the polysiloxane/hydrocarbon mixture is to impart lubricating/detaching/fluidifying character to an organic polymer is immaterial to a determination of the patentability of the mixture itself. Therefore, any reference that discloses the materials delineated by claim 1 or 3 will be held as anticipatory regardless of its stated utility.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 2-3, 12-14, 16, 18-19, 21-22, and 25-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Tanaka et al., U.S. patent # 5,416,151. Tanaka discloses a polymer composition comprising (i) a polymer derived from butene, (ii) an inorganic filler, (iii) a hydrocarbon oil, and optionally (iv) a thermoplastic resin other than (i). Relevant to the present discussion, squalane, which one of ordinary skill will appreciate is the common name given to 2, 6, 10, 15, 19, 23-hexamethyltetracosane, is identified as an embodiment of the hydrocarbon oil in the paragraph bridging columns 3

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and 4. While the broader disclosure provides for the incorporation of 2 to 20 parts of the hydrocarbon oil per 100 parts of (i) and (ii) combined, Table 1 outlines specific examples of the composition wherein the amount of the hydrocarbon is expressed relative to (i) and (ii) separately. In all instances the hydrocarbon oil is present in a quantity corresponding to between 25 wt. % and 75 wt.% of the butene polymer. (The Examples all employ paraffin oil as the hydrocarbon oil but it will be readily evident to one of ordinary skill that squalane could be substituted for the paraffin oil in similar amounts.)

As for claim 19, polystyrene is mentioned as one of the embodiments of component (iv) in column 4, lines 22-26.

Claims 2-3, 12-13, 16, 18-23, and 25-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda et al., U.S. patent # 4,762,878. Takeda discloses a composition comprising (A) a hydrogenated copolymer derived from the polymerization of a vinylaromatic such as styrene and a diene such as butadiene or isoprene (column 3, lines 3-8), (B) a polymer derived from isopropenyltoluene, and (C) either a low α -olefin (co)polymer or squalane. In addition to these materials, it is contemplated that additives including antioxidants, antistatic agents, fillers, and pigments may be incorporated (column 5, lines 1-30).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takeda et al., U.S. Patent # 4,762,878. It is immediately obvious that, where (A) and (B) together comprise 60-70 wt.% of the composition, this limitation is satisfied.

Allowable Subject Matter

Claims 1, 4-11, 15, and 28-29 would be allowable if rewritten or amended to overcome the objections/rejection(s) under 35 U.S.C. 112, first/second paragraph, set forth in this Office action. The Examiner could not locate a reference that disclosed the required genus of hydrocarbon compounds in combination with a polysiloxane having a molecular weight, number average or weight average, above 500,000. One of the non-patent-literature references furnished by Applicant discloses a blend of squalane and polydimethylsiloxane but the polymer does not adhere to the molecular weight limitation.

The prior art is replete with references disclosing hydrocarbon oils and siloxane polymers as internal mold release agents for various polymer matrices. However, the disclosure of their use together is significantly more rare and there were no instances where the specific materials of claim 1 were employed in this or any other capacity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc S. Zimmer whose telephone number is 571-272-1096. The examiner can normally be reached on Monday-Friday 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

May 28, 2004

A handwritten signature in black ink, appearing to read "Margaret G. Moore". The signature is fluid and cursive, with the first name "Margaret" being more prominent than the last name "Moore".

MARGARET G. MOORE
PRIMARY PATENT EXAMINER
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